Ribosomal Protein S2 (h7): 293 Lysate: sc-114060



BACKGROUND

Ribosomal subunits are synthesized in the nucleus, and mature 40S and 60S subunits are exported stoichiometrically into the cytoplasm. Both 40S and 60S subunits are composed of four RNA species and approximately 80 structurally distinct proteins. Mitochondrial ribosomes consist of a small 28S subunit and a large 39S subunit. Ribosomal proteins have the ability to pass through the nuclear envelope in the native state, making them the largest of the structures accommodated by the nuclear pore complexes. The nuclear export of ribosomal subunits is a unidirectional, saturable and energy-dependent process. Ribosomal Protein S2 is part of the 40S subunit that mediates aminoacyltransfer RNA binding to the ribosome, thereby affecting the fidelity of mRNA translation. Ribosomal Protein S2 is methylated by protein arginine methyltransferase 3 (PRMT3), which may inhibit ubiquitin-mediated proteolysis of Ribosomal Protein S2. Ribosomal Protein S2 expression has been shown to be elevated in human premalignant leukoplakia, head and neck squamous cell carcinomas and colon and breast cancers, making it a potentially useful diagnostic marker for some human tumors.

REFERENCES

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STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

CHROMOSOMAL LOCATION

Genetic locus: RPS2 (human) mapping to 16p13.3.

PRODUCT

Ribosomal Protein S2 (h7): 293 Lysate represents a lysate of human Ribosomal Protein S2 transfected 293 cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

Ribosomal Protein S2 (h7): 293 Lysate is suitable as a Western Blotting positive control for human reactive Ribosomal Protein S2 antibodies.

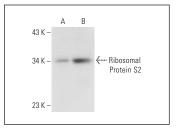
Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

Ribosomal Protein S2 (80-H): sc-130399 is recommended as a positive control antibody for Western Blot analysis of enhanced human Ribosomal Protein S2 expression in Ribosomal Protein S2 transfected 293 cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG κ BP-HRP: sc-516102 or m-lgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



Ribosomal Protein S2 (80-H): sc-130399. Western blot analysis of Ribosomal Protein S2 expression in non-transfected: sc-110760 (**A**) and human Ribosomal Protein S2 transfected: sc-114060 (**B**) 293 whole cell Ivsates.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

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